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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,845	07/10/2003	Daniel M. Dreps	AUS920030015US1	1731

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EXAMINER

TAN, VIBOL

ART UNIT PAPER NUMBER

2819

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/616,845

Applicant(s)

DREPS ET AL.

d

Examiner

Vibol Tan

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 22 is/are rejected.
- 7) ☒ Claim(s) 2-21 and 23-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hedberg (U. S. PAT. 6,288,564).

In claim 1, Hedberg teaches all claimed features in Fig. 1, a receiver circuit for terminating a transmission line comprising: a receiver (1) having an input (IN) coupled to a transmission line output of said transmission line (TR) forming a common node (a node connecting the output of the transmission line and the input of the receiver, not marked), an output generating a digital signal (OUT) in response to a signal (IN) at said transmission line output and a threshold voltage (a voltage from 2); a termination network (2) coupled to said common node for setting a plurality of Thevenins voltages (TZ1-TZ3) and Thevenins impedances (resistance of TZ1-TZ3) in response to a plurality of control signals (outputs from A1-A3); and logic circuitry (3) for generating said plurality of control signals in response to a plurality of mode setting inputs (input signals provided to A1-A3).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2819

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muljono (U. S. PAT. 6,347,350) in view of Hedberg.

In claim 22, Muljono teaches all claimed features in Fig. 7, an integrated circuit (IC) comprising: a digital processor (702); memory (704 or 706) for storing instructions and data for said processor; input/output (I/O) interface circuitry (108 or 710) for communicating to device circuitry external to said IC; a receiver circuit (inherent, not shown) in said interface circuitry (708) for terminating a transmission line coupling said receiver circuit to said device circuitry; with the exception of teaching the claimed detailed of the receiver circuit. However, Hedberg teaches in Fig. 1, a receiver (1) having an input (IN) coupled to a transmission line output of said transmission line (TR) forming a common node (a node connecting the output of the transmission line and the input of the receiver, not marked), an output generating a digital signal (OUT) in response to a signal (IN) at said transmission line output and a threshold voltage (a voltage from 2); a termination network (2) coupled to said common node for setting a plurality of Thevenins voltages (TZ1-TZ3) and Thevenins impedances (resistance of TZ1-TZ3) in response to a plurality of control signals (outputs from A1-A3); and logic circuitry (3) for generating said plurality of control signals in response to a plurality of mode setting inputs (input signals provided to A1-A3).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to combine the teachings of both references in order to

Art Unit: 2819

provide a computer system using line receiver circuit with line termination impedance to match the impedance of the system, thus allowing the system to operate at higher speed.

5. Claims 2-21 and 23-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vibol Tan

Primary Examiner, AU 2819



**VIBOL TAN**  
**PRIMARY EXAMINER**